

Amendment USPASN 10/021,871 14381/0012

**Amendments to the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application.

Claims 1-33 are presently pending. Please amend claims 1, 15, 20 and 28 as follows. No new matter has been added by these amendments.

**Claims as Presently Pending Following Entry of Amendments**

1. (currently amended) A probiotic composition comprising *Lactobacillus casei* strain KE01 having ATCC accession number PTA-3945, wherein said *Lactobacillus casei* strain KE01 is derived from a [substantially] biologically pure culture.
2. (previously amended) The probiotic composition according to claim 1 further comprising inert or active ingredients selected from the group consisting of carbohydrates, polypeptides, lipids, phytochemicals and combinations thereof.
3. (original) The probiotic composition according to claim 2 wherein said carbohydrate is selected from the group consisting of monosaccharides, disaccharides, oligosaccharides, polysaccharides and combinations thereof.
4. (original) The probiotic composition according to claim 3 wherein said carbohydrate is selected from the group consisting of trehalose, maltose, sucrose, dextrose, lactose, inulin, ribose and combinations thereof.
5. (original) The probiotic composition according to claim 3 wherein said disaccharide is trehalose dihydrate.
6. (original) The probiotic composition according to claim 3 wherein said oligosaccharide is fructo-oligosaccharide.
7. (original) The probiotic composition according to claim 3 wherein said polysaccharide is malt dextrin.

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8. (original) The probiotic composition according to claim 2 wherein said polypeptide is selected from the group consisting of whey protein, egg albumin, gelatin, milk proteins, and combinations thereof.

9. (original) The probiotic composition according to claim 2 wherein said lipid is selected from the group consisting of soy bean oil, olive oil, palm kernel oil, peanut oil, walnut oil, canola oil and combinations thereof.

10. (original) The probiotic composition according to claim 2 wherein said phytochemical is selected from the group consisting of polyphenols, saponins, flavanoids, monoterpenes, allyl sulfides, lycopenes, carotenoids, polyactetylenes, silymarin, glycyrrhizin catechins and combinations thereof.

11. (original) The probiotic composition according to claim 1 further comprising trehalose.

12. (original) The probiotic composition according to claim 11 further comprising malt dextrin.

13. (original) The probiotic composition according to claim 11 further comprising fructo-oligosaccharide.

14. (original) The probiotic composition according to claim 13 wherein said Lactobacilli casei strain KE01 is present in the amount of approximately 10<sup>5</sup> to 10<sup>11</sup> colony forming units (CFU) per gram.

15. (currently amended) The probiotic composition according to [anyone] any one of claims 1 through 14 wherein said probiotic composition is a bolus, gel or liquid that is administered to an animal.

16. (original) The probiotic composition according to claim 15 wherein in said animal is selected from the group consisting of mammals, fish, birds, and reptiles.

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17. (original) The probiotic composition according to claim 16 wherein said mammal is selected from the group consisting of humans, horses, dogs, cats, rabbits, sheep, swine, and cows.

18. (original) The probiotic composition according to claim 16 wherein said bird is selected from the group consisting of chickens, turkeys, pheasants, quail, parakeets, and parrots.

19. (original) The probiotic composition according to claim 15 wherein said bolus is selected from the group consisting of gelatin capsules, pressed tablets, and gel caps.

20. (currently amended) The probiotic composition according to claim 19 wherein said bolus is packaged in a polymer-lined foil pouch.

21. (previously amended) A probiotic composition comprising:

- powdered Lactobacillus casei strain KE01 having ATCC accession number PTA-3945 in the amount of from approximately 1 to 5 weight percent;
- a disaccharide from approximately 25 to 95 weight percent;
- an oligosaccharide from approximately 0 to 10 weight percent; and
- a polysaccharide from approximately 0 to 50 weight percent.

22. (previously amended) The probiotic composition of claim 21 wherein said powdered Lactobacillus casei strain KE01 having ATCC accession number PTA-3945 has approximately 10<sup>5</sup> to 10<sup>11</sup> CFU per gram and is present in the amount of approximately 3 weight percent.

23. (original) The probiotic composition of claim 21 wherein said disaccharide is present in the amount of approximately 62 weight percent.

24. (original) The probiotic composition of claim 21 wherein said oligosaccharide is present in the amount of approximately 5 weight percent.

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25. (original) The probiotic composition of claim 21 wherein said polysaccharide is present in the amount of approximately 30 weight percent.

26. (original) The probiotic composition of claim 21 wherein said disaccharide is trehalose, said oligosaccharide is fructo-oligosaccharide and said polysaccharide is malt dextrin.

27. (previously amended) A probiotic composition comprising:

approximately 3 weight percent of powdered Lactobacillus casei strain KE01 having ATCC accession number PTA-3945 having approximately 105 to 1011 CFU per gram;

approximately 62 weight percent trehalose;

approximately 5 weight percent fructo-oligosaccharide; and

approximately 30 weight percent malt dextrin.

28. (currently amended) A method of inhibiting enteric pathogen disease in an animal comprising:

orally administering an effective amount of the probiotic compositions according to [anyone] any one of claims 1, 11, 12, 13, 20 or 26 to an animal in need thereof.

29. (original) The method according to claim 28 wherein said enteric pathogen is selected from the group consisting of enteropathogenic Escherichia coli (EPEC), enterotoxigenic E. coli (ETEC), Salmonella enteritidis, Yersina pseudotuberculosis and Listeria monocytogenes.

30. (original) The method according to claim 28 wherein said animal is selected from the group consisting of mammals, fish, birds, and reptiles.

31. (original) The method according to claim 30 wherein said mammal is selected from the group consisting of humans, horses, dogs, cats, rabbits, sheep, swine, and cows.

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32. (original) The method according to claim 30 wherein said bird is selected from the group consisting of chickens, turkeys, pheasants, quail, parakeets, and parrots.

33. (original) The method according to claim 28 wherein said administering step further comprises a probiotic compositions selected from the group consisting of gelatin capsules, pressed tablets, gel caps, animal feed and liquid beverages.

**REMARKS/ARGUMENTS:**

November 4, 2003 Telephone Conference Summary

The Applicant and his attorney of record wish to thank the Examiner for the courtesy extended during a telephonic interview conducted November 4, 2003. During the telephone conference the Examiner and the Applicant's attorney discussed claim rejections under 35 U.S.C. §112, first and second paragraphs and 35 U.S.C. §§ 102 (b) and 103 (a). This Response and Amendment is responsive to the remarks made by the Examiner and Applicant's attorney during the November 4, 2003 telephone conference. The following text that specifically identifies each issue discussed and the proposed amendment or remarks required to traverse the rejections of record.

Remarks regarding claim amendments.

Claim 1 was rejected under 35 U.S.C. § 112 second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter of the invention. Specifically, the Examiner states that the phrase "substantially pure culture" is unclear because the specification does not clearly define the intended meaning of substantially pure culture. During the telephonic interview on November 4, 2003 this rejection was discussed with Examiner Ware. The Applicant directed the Examiner's attention to paragraphs 52 and 53 and the specification and asserted that the meaning of "substantially pure" was clearly defined. However, the Examiner maintained her rejection based on the uncertainty inherent in the word "substantially." After discussion it was agreed that the term "biologically" pure would overcome the 35 U.S.C. § 112 second paragraph rejection and that the specification inherently supported the new